#3

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/642,405

DATE: 07/05/2001
TIME: 16:38:23

Input Set : A:\20413y.txt
Output Set: N:\CRF3\07032001\I642405.raw

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      4 <110> APPLICANT: Neeper, Michael P.
      5       McClements, William L.
      6       Jansen, Kathrin U.
      7       Schultz, Loren D.
      8       Chen, Ling
      9       Wang, Xin-Min
     11 <120> TITLE OF INVENTION: SYNTHETIC HUMAN PAPILLOMAVIRUS GENES
     14 <130> FILE REFERENCE: 20413Y
     16 <140> CURRENT APPLICATION NUMBER: 09/642,405
C--> 17 <141> CURRENT FILING DATE: 2001-06-21
     19 <150> PRIOR APPLICATION NUMBER: PCT/US00/22932
     20 <151> PRIOR FILING DATE: 2000-08-21
     22 <150> PRIOR APPLICATION NUMBER: 60/210,143
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     25 <150> PRIOR APPLICATION NUMBER: 60/150,728
     26 <151> PRIOR FILING DATE: 1999-08-25
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     30 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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     59 aaggagtacc tgcgccacgg cgaggagtac gacctgcagt tcatcttcca gctgtgcaag    1140
     60 atcaccctga ccgccgacgt gatgacctac atccacagca tgaacagcac catcctggag    1200
     61 gactggaact tcggcctgca gcccccctcc ggcggtaccc tggaggacac ctaccgcttc    1260
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63 ctgaagaagt acaccttctg ggaggtgaac ctgaaggaga agttcagcgc cgacctggac 1380
64 cagttccccc tgggccgcaa gttcctgctg caggccggcc tgaaggccaa gcccaagttc 1440
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79 gacagcgaca ccggcgagga cctggtggac ttcatcgtga acgacaacga ctacctgacc 180
80 caggccgaga ccgagaccgc ccacgccctg ttcaccgccc aggaggccaa gcagcaccgc 240
81 gacgccgtgc aggtgctgaa gcgcaagtac ctgggcagcc ccctgagcga catcagcggc 300
82 tgcgtcgaca acaacatcag cccccgcctg aaggccatct gcatcgagaa gcagagccgc 360
83 gccgccaagc gccgcctgtt cgagagcgag gacagcggct acggcaacac cgaggtggag 420
84 acccagcaga tgctgcaggt ggagggccgc cacgagaccg agacccccctg cagccagtac 480
85 agcggcggca gcggcggcgg ctgcagccag tacagcagcg gcagcggcgg cgagggcgtg 540
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87 agcaacgcca aggccgccat gctggccaag ttcaaggagc tgtacggcgt gagcttcagc 660
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99 cagatcgtga tgttcctgcg ctaccagggc gtggaattca tgagcttcct gaccgccctg 1380
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102 ttcgtgaaca gcaagagcca cttctggctg cagcccctgg ccgacgccaa gatcggcatg 1560
103 ctggacgacg ccaccgtgcc ctgctggaac tacatcgacg acaacctgcg caacgccctg 1620
104 gacggcaacc tggtgagcat ggacgtgaag caccgccccc tggtgcagct gaagtgccct 1680
105 cccctgctga tcaccagcaa catcaacgcc ggcaccgaca gccgctggcc ctacctgcac 1740
106 aaccgcctgg tggtgttcac cttccccaac gagttcccct tcgacgagaa cggtaacccc 1800
107 gtgtacgagc tgaacgacaa gaactggaag agcttcttca gccgcacctg gagccgcctg 1860
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113 <212> TYPE: DNA
114 <213> ORGANISM: Artificial Sequence
116 <220> FEATURE:

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tgcgacagca ccctgcgcct gtgcgtgcag agcacccacg tggacatccg caccctggag 240
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181 atcgacggcg tgaaccacca gcacctgccc gctcgcaggg ccgagcccca gcgccacacc 180
182 atgctgtgca tgtgctgcaa gtgcgaggcc cgcatcgagc tggtggtgga gagcagcgct 240
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188 <212> TYPE: DNA
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197 gtgctgctgt acaaggccaa gcagatgggc ctgagccaca tcggcatgca ggtggtgcct 180
198 cctctgaagg tgagcgaggc caagggccac aacgccatcg agatgcagat gcacctcgag 240
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211 tgggccagca gcaaggctcc ccacaagcac gccatcgtga ccgtgaccta cgacagcgag 1020
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217 <212> TYPE: DNA
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226 cgctgggaga acgccatctt cttcgccgct cgcgagcacg ggatccagac cctgaaccac 180
227 caggtggtgc ccgcctacaa catcagcaag agcaaggccc acaaggccat cgagctgcag 240
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229 acctgcgagg agctgtggaa caccgagccc acccactgct tcaagaaggg aggccagacc 360
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231 gtgtactaca tgaccgacgc cggcacctgg gacaagaccg ccacctgcgt gagccaccgc 480
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233 gagaagtacg gcaacaccgg cacctgggag gtgcacttcg gcaacaacgt gatcgactgc 600
234 aacgacagca tgtgcagcac cagcgacgac accgtgagcg ccacccagct ggtgaagcag 660
235 ctgcagcaca ctcccagccc ctacagcagc accgtgagcg tgggcaccgc caagacctac 720
236 ggccagacca gcgccgccac tcgccctggc cactgcggcc tggccgagaa gcagcactgc 780
237 gggcccgtga accctctgct gggcgccgcc accgccaccg gcaacaacaa gcgccgcaag 840
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239 tgcctgcggt accgcctgcg caagcacagc gaccactacc gcgacatcag cagcacctgg 960
240 cactggaccg gcgccgggaa cgagaagacc ggcatcctga ccgtgaccta ccacagcgag 1020
241 acccagcgca ccaagttcct gaacaccgtg gccatccccg acagcgtgca gatcctggtg 1080
242 ggctacatga ccatgtaa 1098
244 <210> SEQ ID NO: 9
245 <211> LENGTH: 129
246 <212> TYPE: DNA
247 <213> ORGANISM: Artificial Sequence
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255 cgcctgctg 129
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258 <211> LENGTH: 129
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271 <211> LENGTH: 129
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281 tgccctccc 129
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284 <211> LENGTH: 132
285 <212> TYPE: DNA
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L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date